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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/457,068	12/07/1999	JULIO C. BERMUDEZ	4203-P	7264

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LLOYD W. SADLER  
PARSONS BEHLE & LATIMER  
201 SOUTH MAIN STREET  
SUITE 1800  
SALT LAKE CITY, UT 84111-2218

[REDACTED] EXAMINER

DELATORRE, CRESCELLE N

ART UNIT	PAPER NUMBER
2174	

DATE MAILED: 11/08/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	09/457,068	BERMUDEZ ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Crescelle dela Torre	2174	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

1) Responsive to communication(s) filed on 01 October 2002.

2a) This action is FINAL.                  2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

4) Claim(s) 31-56 is/are pending in the application.

4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

5) Claim(s) \_\_\_\_\_ is/are allowed.

6) Claim(s) 31-56 is/are rejected.

7) Claim(s) \_\_\_\_\_ is/are objected to.

8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11) The proposed drawing correction filed on \_\_\_\_\_ is: a) approved b) disapproved by the Examiner.  
 If approved, corrected drawings are required in reply to this Office action.

12) The oath or declaration is objected to by the Examiner.

#### Priority under 35 U.S.C. §§ 119 and 120

13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) All b) Some \* c) None of:

1. Certified copies of the priority documents have been received.

2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.

3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
 a) The translation of the foreign language provisional application has been received.

15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

#### Attachment(s)

1) <input type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ .
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)
3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .	6) <input type="checkbox"/> Other: _____ .

**DETAILED ACTION**

This action is responsive to communications: RCE Request and Amendment, both filed on 10/1/02.

This action is non-final.

Claims 31-56 are pending in this application. Claim 31 is the sole independent claim. In the Amendment, filed on 10/1/02, claim 31 was amended.

The present title of the invention is "Method and Apparatus for Monitoring Dynamic Systems Using N-Dimensional Representations of Critical Functions" as originally filed.

***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 10/1/02 has been entered.

***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

4. Claims 31-56 are rejected under 35 U.S.C. 103(a) as being unpatentable over Richards et al (U.S. patent 5,121,469) in view of Schwuttke et al (U.S. patent 6,222,547).

As per claim 31, Richards et al, hereinafter Richards, teach the following:

- (A) an information environment, at figure 12;
- (B) a framework within the environment, at column 17, lines 4-5; and

(C) an object located about the framework, wherein the object is correlated with data, at figure 12, with P1-P9, and column 14, lines 3-5, 28-37.

As to claim 31, Richards teaches the above elements of applicant's invention. However, Richards does not specifically teach that the framework comprises displaying normal values to assist the user in discerning deviations from the normal values, nor displaying an object in relation to the normal values. However, Richards describes at column 16, lines 19-34, that the "processor may determine the average or mean of these values, and establish the minimum and maximum plot values for the associated image parameter relative to this average or mean value".

On the other hand, it is known in the art that information can be displayed relative to normal values. For instance, Schwuttke et al, hereinafter Schwuttke, show at figures 4, 5A, 5B, and describes at column 8, lines 5-23, that "objects are displayed in the default color, white, to indicate that the parameter it represents is in its normal state" and that "objects are displayed yellow or red to indicate whether the parameter is in a warning limit alarm state". In addition, Schwuttke teaches that the graphical object, during a warning state, rises to a height above a grid which is "proportional to how far the parameter has exceeded the limit". Thus, Schwuttke makes up for the missing portions in Richards by teaching the display of objects relative to normal values.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to include the display of information in relation to normal values as in Schwuttke in the invention of Richards because it helps a user "recognize impending

alarm conditions earlier and with greater reliability" [see column 4, lines 49-61 of Schwuttke].

Richards inherently teaches a natural dynamic system [claim 32] and an artificial dynamic system [claim 33] at figures 2, 3.

As to claim 34, Richards teaches sensor presented information, at figure 2, and column 7, lines 8-10.

Regarding claim 35, Richards teaches a measurement of interaction between one or more vital signs of the system, at figure 12.

As per claim 36, Richards describes mapping system data, with mapping means 16b, at figure 1, and column 6, lines 40-42.

As to claim 37, Richards teaches a relationship between a data object and expected data, at column 13, lines 1-9.

In addition, Richards shows objects within health [claim 38] and life [claim 39] spaces, at figure 12.

Regarding claim 40, Richards teaches data attributes, such as color and hue, at column 4, line 55 to column 5, line 5.

As to claim 41, Richards shows a 3-D shape correlation, at figure 12.

As per claim 42, Richards shows a major and minor axis for the object, including a length dimension for the minor axis, at figure 14, and column 4, lines 60-61.

In addition, Richards teaches 3-D shape changes [claim 43], attribute changes [claim 44], and axes changes [claim 45], at figure 15, and column 20, lines 3-15, which describes that the system "involves a cycle in which the system produces a display, that

display is perceived by the analyst, the analyst adjusts the operation of the system, and the system in response adjusts its display to present a new display".

As per claim 46, Richards shows a time reference axis, at figure 14.

Regarding claims 47-49, Richards teaches that a user can change the viewpoint, at block 230, in figure 15, and column 20, lines 61-63.

As to claim 50, Richards teaches a zoom in and out operation, at block 234, in figure 15.

As per claim 51, Richards inherently teaches a history display, at column 20, lines 56-57.

Regarding claim 52, Richards describes display customization, with block 226, at figure 15, and column 20, lines 59-60.

Richards teaches object storage [claim 53] with memory 14, at figure 1.

In addition, Richards teaches changing the display rate [claims 54, 55] with block 232, at figure 15, and column 20, lines 63-66.

As to claim 56, Richards teaches a comparison with expected data, at column 13, lines 1-9.

### ***Response to Arguments***

5. Applicant's arguments with respect to claims 31-56 have been considered but are moot in view of the new ground(s) of rejection.

Examiner agrees that the combination of Richards and Gibson does not disclose the claim limitations. Rather, the claims have been rejected in view of Richards and Schwuttke.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Crescelle dela Torre whose telephone number is (703) 305-9782. The examiner can normally be reached on Monday-Thursday, from 8am-4pm, and on alternate Fridays, from 8am-3pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kristine Kincaid can be reached on (703) 308-0640. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 746-7239 for official communications; (703) 746-7238 for After Final communications; and (703) 746-7240 for non-official or draft communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

*C. dela Torre*  
CRESCELLE N. DELA TORRE  
PRIMARY EXAMINER